



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

August 27, 2010

Mr. Michael J. Erickson
Associate Vice President/Principal Engineer
ARCADIS
10559 Citation Drive, Suite 100
Brighton, MI 48116

SR-6J

RE: Area 2: Supplemental Remedial Investigation/Feasibility
Study (SRI/FS) Work Plan

Dear Mr. Erickson:

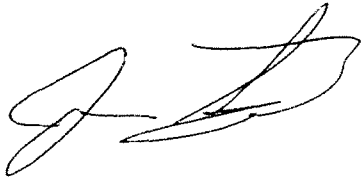
The United States Environmental Protection Agency (EPA) has completed its review of the draft Area 2: SRI/FS Work Plan for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site.

This draft SRI/FS work plan describes the supplemental investigations that will be completed to develop the SRI and FS for Area 2 in support of the Record of Decision. Representatives of EPA and the Michigan Department of Natural Resources and Environment met with representatives from Georgia-Pacific on August 17, 2010, to discuss EPA and MDNRE's concerns with the SRI/FS work plan. EPA has enclosed comments on the document that must be addressed.

Therefore, EPA disapproves the draft Area 2 SRI/FS Work Plan pending receipt of adequate responses to the enclosed comments and a revised final document. Pursuant to the 2007 Agreement and Order on Consent, the responses to the enclosed comments and revised final document must be submitted within (60) sixty days of receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to be 'J. Saric', with a stylized, flowing script.

James A. Saric
Remedial Project Manager
SFD Remedial Response Branch #1

Enclosure

cc: Paul Bucholtz, MDNRE
Gary Griffith, Georgia-Pacific
Richard Gay, Weyerhaeuser

Bcc w/enclosure:

Jeff Keiser, CH2MHILL
Leslie Kirby-Miles, ORC

**U.S.EPA COMMENTS
ON THE
AREA 2 SUPPLEMENTAL REMEDIAL
INVESTIGATION/FEASIBILITY STUDY WORK PLAN
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO
RIVER SITE**

GENERAL COMMENTS

Commenting Organization: U.S. EPA
Section: NA Page #: NA
Original General Comment #: 1

Commentor: Saric
Lines #: NA

The work plan does not clearly define the study area. The Area 2 (A2) study area should clearly be defined as the CH2MHILL study area boundary as defined in Figure 2-1. This boundary was developed by US EPA FIELDs group walking the area and is the most conservative boundary presented. It is recognized that existing sample data may result in some areas not requiring further investigation, however, those areas will need to be discussed in the revised work plan.

Commenting Organization: U.S. EPA
Section: NA Page #: NA
Original General Comment #: 2

Commentor: Saric
Lines #: NA

The proposed sampling approach assumes the conceptual site model (CSM) is accurate, however the presentation of existing data in the work plan does not necessarily confirm this assumption. For example, the RI approach is biased towards mapping and sampling fine-grained deposits, topographically low areas, and historical depositional areas. Some unbiased aerial coverage is required to verify other strata (including but not limited to the study area, coarse grained material, side channels above the 699 contour, bank samples on the southern end of the study area), do not contain elevated concentrations of PCBs. Suggest the existing data be classified by strata of interest and evaluated as part of the Phase I effort to confirm the CSM. If the CSM is not confirmed in the Phase I, evaluation the sampling strategy will need to be revisited and additional samples collected.

Commenting Organization: U.S. EPA
Section: NA Page #: NA
Original General Comment #: 3

Commentor: Saric
Lines #: NA

The work plan needs a more thorough cross-reference with the 2007 Agreement on Consent (AOC) Scope of Work (SOW). There are several areas included in the SOW which are not included in the work plan (i.e. air monitoring). Although not all of the activities specified in the SOW are required for the A2 work plan, a discussion of why certain elements are being omitted from the work plan needs to be included.

Commenting Organization: U.S. EPA
Section: NA Page #: NA
Original General Comment #: 4

Commentor: Saric
Lines #: NA

It is not clear what future sediment, bank and floodplain sampling will occur. Although future sampling events are mentioned there is no link between future sampling activities and previously completed sample results. Therefore, a complete list of anticipated deliverables should be included. Are separate sample plans anticipated in a Phase I, Phase II, etc. sampling effort? Will A2 be subdivided into subareas as was done for Area I for sampling? How will the schedule be affected if multiple sampling efforts are required?

Commenting Organization: U.S. EPA
Section: NA Page #: NA
Original General Comment #: 5

Commentor: Saric
Lines #: NA

A detailed schedule identifying the date of each of the deliverables, modeling, and sampling events must be included. Further, considering the size of the study area and the amount of previous work conducted in A2, the submittal of the draft Remedial Investigation Report to EPA must be included in the work plan as April 1, 2012. All sampling plans and work plan deliverables need to take into account this RI report submittal date.

Commenting Organization: U.S. EPA
Section: NA Page #: NA
Original General Comment #: 6

Commentor: Saric
Lines #: NA

The work plan discusses the area at the upper end of the impoundment where fine-grained sediments were deposited after the Plainwell Dam was removed, and where sand and gravel was subsequently deposited on top of these fine-grained sediments. This area should be labeled on a figure. Is this the same area where future erosion may occur due to lateral migration of the meandering channel?

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA
Section: 1 Page #: 1-1
Original Specific Comment #: 1

Commentor: Saric
Lines #: NA

In the second paragraph, after the first sentence insert the following sentence.
“On April 23, 2010, the U.S. Bankruptcy court approved Lyondell’s reorganization plan.” Also, the last line of the second paragraph should be re-written to read “ ...approximately \$100 million for Site-related work. ”

Commenting Organization: U.S. EPA
Section: 3.1 Page #: 3-2
Original Specific Comment #: 2

Commentor: FIELDS
Lines #: NA

The radials in the second phase of sampling were not performed around samples with only elevated PCB levels from the first phase; they were collected around a range of PCB levels from the first phase.

Commenting Organization: U.S. EPA
Section: 4 Page #: 4-1
Original Specific Comment #: 3

Commentor: FIELDS
Lines #: NA

In first paragraph in Step 1, second sentence, did the authors accidentally forget to include the term “sediment”?

Commenting Organization: U.S. EPA
Section: 4.1.1 Page #: 4-4
Original Specific Comment #: 4

Commentor: FIELDS
Lines #: NA

A full-scale bathymetric survey would give a lot more information that could be used in the future to assess changes in sediment elevation if changes to the Otsego Dam are conducted and as changes to this portion of the river occur due to the removal of the Plainwell Dam. This type of survey could be conducted by the FIELDS Group as was done on the Plainwell Impoundment and on the portion of the Kalamazoo River in downtown Kalamazoo and downstream.

Commenting Organization: U.S. EPA
Section: 4.2.1 Page #: 4-7
Original Specific Comment #: 5

Commentor: FIELDS
Lines #: NA

Regarding the first bullet point, will any field validation be performed to “truth” the classification of potential fine-grained sediment from the high resolution aerial photographs? Are there any literature examples of the success of this method?

Commenting Organization: U.S. EPA
Section: 4.2.1 Page #: 4-7
Original Specific Comment #: 6

Commentor: FIELDS
Lines #: NA

Regarding the second bullet point, why not perform an elevation survey and get more accurate estimates of elevation than relying on high resolution digital elevation maps and aerial photographs? The survey could be performed as part of the planned field reconnaissance in the winter or early spring as note in Phase 2, bullet point one, below.

Were any field validation methods used (or will be used) to “truth” these elevation contours?

Commenting Organization: U.S. EPA
Section: 4.2.2 Page #: 4-8
Original Specific Comment #: 7

Commentor: FIELDS
Lines #: NA

What is the rational for excluding the 2-to 6-inch increment of the sediment cores for analysis? This increment should be included.

Commenting Organization: U.S. EPA
Section: 4.2.2 Page #: 4-8
Original Specific Comment #: 8

Commentor: FIELDS
Lines #: NA

Regarding the second bullet point only comparing the 0-2 inch interval really does not give a complete picture of the comparison of earlier data (1993 and 2000) to the present. All intervals should be analyzed and compared. What was the logic used to select these 22 locations for comparison?

Commenting Organization: U.S. EPA
Section: 4.2.3 Page #: 4-9
Original Specific Comment #: 9

Commentor: FIELDS
Lines #: NA

In the second to last sentence in this first bullet point, how will the “likelihood of a strata to contain fine-grained sediment (or PCB)” be determined? (There did not appear to be an explanation of this in Section 4.2.1.)

Commenting Organization: U.S. EPA
Section: 4.2.3 Page #: 4-9
Original Specific Comment #: 10

Commentor: FIELDS
Lines #: NA

In the third bullet point what was the logic used to select the locations of these bank samples? Why were no bank samples proposed on any of the banks of the southern-most braided region in the mid-section of Area 2.

Commenting Organization: U.S. EPA
Section: 5.2 Page #: 5-1
Original Specific Comment #: 11

Commentor: Saric
Lines #: NA

The schedule section needs to be re-written to include submittal dates for specific deliverables that are part of the A2 RI. Further, although, EPA concurs with the concept of avoiding late fall field activities to minimize safety risks, the elimination of all field work from September 30th through March 31 is unacceptable. Georgia-Pacific must notify EPA of locations where access is not obtainable due to flooding, inclement weather or hunting. Such work will then be rescheduled to occur later that spring but shall not ultimately delay the submittal of the draft RI report to EPA.

Commenting Organization: U.S. EPA
Section: 5.2 Page #: 5-2
Original Specific Comment #: 12

Commentor: Saric
Lines #: NA

The A2 risk assessment may incorporate information from the Area 1 risk assessment. However, A2 risk assessment information must be incorporated into the A2 RI report, regardless of the status of the Area 1 RI report. The schedules for submittal of the A2 risk assessment and A2 RI report are not contingent upon any activities in Area 1.

Editorial Notes:

Page 2-4 – last sentence has an extra period.

Page 3-1 – the previous studies in Section 3.1 should have citations.

Page 3-6 Bullet beginning “USGS scientists” – sentence in the middle of the bullet begins “This resulting in...”.